## SUPPORT FOR THE AMENDMENT

Support for claim 10 is found in claim 1 as originally presented. No new matter would be added to this application by entry of this amendment.

Upon entry of this amendment, claims 1-10 will now be active in this application.

## REQUEST FOR RECONSIDERATION

The claimed invention is directed to a process for preparing oligomers of n-butenes comprising separating a $C_4$ starting stream into streams of mainly linear hydrocarbons and mainly branched hydrocarbons followed by oligomerization of the linear hydrocarbons and separate processing of the branched hydrocarbons.

Applicants wish to thank examiner Cheung for the helpful and courteous discussion held with their U.S. representative on March 16, 2007. At that time, applicants' U.S. representative argued that there was no suggestion in the prior art to prepare separate streams of linear and branched hydrocarbons followed by separate processing thereof. The following is intended to expand upon the discussion with the examiner.

N-butene oligomers may be used in the preparation of alcohols which are used in the preparation of plasticizers or surfactant alcohols. The presence of branched alcohols in the oligomerization hydrocarbon stream can reduce the properties of the desired plasticizer. Accordingly, methods for processing n-butene oligomers are still sought.

The claimed invention addresses the problem by providing a process for preparing oligomers of n-butene comprising separating a $C_4$ starting stream into linear and branched hydrocarbon fractions followed by oligomerizing the linear hydrocarbons and separately processing the branched hydrocarbons. Applicants have discovered that such a process of membrane separation provides for an efficient process for the preparation of butene oligomers. Such a process is nowhere disclosed or suggested in the cited prior art.

The rejection of claims 1-9 under 35 U.S.C. § 103(a) over Pierotti et al. (U.S. 6,440,885) in view of Rath (U.S. 5,910,550) is respectfully traversed.

None of the cited prior art discloses or suggests the claimed process in which linear and branched hydrocarbon streams are separately oligomerized and processed.

Pierotti et al. describes a zeolite membrane which is described as useful for separation processes as well as to effect chemical reactions (column 6, lines 64-65 and column 7, lines 66-67). The two tables appearing at columns 7 and 8 identify molecular species separated, feedstocks/processes which can be reacted as well as some possible product yields. In both tables, mixed butenes are identified as feedstocks while n-butenes are identified as either a separated molecular species or a reaction product yielded. There is no disclosure of a step of oligomerizing an n-butene fraction.

In contract, the claimed invention is directed to a process in which a linear $C_4$ fraction is oligomerized. Applicants note that the claims have been amended to more clearly recite a step of oligomerization of a linear $C_4$ hydrocarbon fraction. As the cited reference fails to disclose or suggest a step of oligomerization of a linear $C_4$ hydrocarbon fraction, the claimed invention is not obvious from this reference.

Moreover, nowhere in the reference is it disclosed to prepare a stream of **branched** butenes. In the absence of a disclosure or suggestion of a branched butene fraction, the claimed invention clearly would not be obvious from the disclosure of Pierotti et al.

Further, the disclosure in the reference that mixed butenes are either separated or reacted to yield n-butenes would teach away from the formation of a branched butene stream as the reference teaches that the **reaction product** of contacting mixed butenes with the disclosed zeolite layer would be n-butenes. As a reaction product being n-butenes from mixed butenes, the inference is that branched butenes are converted to n-butenes. Thus, any

process which creates or reacts a branched butene stream is clearly not obvious from this reference.

The secondary reference of Rath has merely been cited for a process of reacting isobutene.

The teaching of the secondary reference does not cure the basic deficiencies of the primary reference which fails to disclose or suggest oligomerization of a linear $C_4$ hydrocarbon fraction nor how to obtain a branched butene fraction. As the combined teachings of the references fail to disclose or suggest oligomerization of a linear butene stream as well as creation and reaction of a branched butene stream, the claimed invention is clearly not rendered obvious from the references.

In contrast, the claimed invention is directed to a process for preparing oligomers of n-butenes by separating a butene stream into linear hydrocarbons and branched hydrocarbons and separately oligomerizing the linear hydrocarbons and reacting the branched hydrocarbons. Applicants note the claims have been amended to clarify the oligomerization of the linear hydrocarbon fraction. As the cited references fail to disclose or suggest oligomerizing a linear hydrocarbon fraction and separately reacting a branched hydrocarbon fraction the claimed invention is clearly not rendered obvious from the references and accordingly withdrawal of the rejection under 35 U.S.C. § 103(a) is respectfully requested.

The rejection of claims 1-9 under 35 U.S.C. § 112, second paragraph has been obviated by appropriate amendment.

Applicants have now amended the claims to clearly recite a process step of oligomerizing the linear hydrocarbon fraction. In view of applicants' amendment, withdrawal of this ground of rejection is respectfully requested.

Applicants submit this application is now in condition for allowance and early notification of such action is earnestly solicited.

Respectfully submitted,

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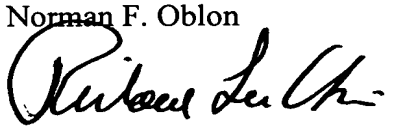

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